TITLE

by

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DISSERTATION

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DOCTOR OF PHILOSOPHY

2008

MAJOR: Physics
Approved by:
Advisor

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Year

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This is a dedication.

"The fact that we live at the bottom of a deep gravity well, on the surface of a gas covered planet going around a nuclear fireball 90 million miles away and think this to be normal is obviously some indication of how skewed our perspective tends to be."

— Douglas Adams, The Salmon of Doubt: Hitchhiking the Galaxy One Last Time

ABSTRACT

TITLE HERE

by

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Advisor: Professor Your Prof

Major: Physics

Degree: Doctor of Philosophy

Abstract here

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List of Symbols

Symbol	Description	Unit
$E_{ m F}$	Fermi energy	eV
σ	conductivity	μS
$V_{ m bg}$	backgate voltage	V
$V_{ m ds}$	drain voltage	V
$I_{ m ds}$	drain current	V
χ	electron affinity	V
$\mu_{ m H}$	Hall mobility	${\rm cm}^2{\rm V}^{-1}{\rm s}^{-1}$
$\mu_{ m FE}$	field-effect mobility	$cm^{2} V^{-1} s^{-1}$ $cm^{2} V^{-1} s^{-1}$

List of Physical Constants

Symbol	Quantity	Value
$k_{ m B}$	Boltzmann's constant	$1.38066 \times 10^{-23}\mathrm{JK^{-1}}$
ϵ_0	dielectric constant	$8.85418 \times 10^{-12}\mathrm{A}^2\mathrm{s}^4\mathrm{kg}^{-1}\mathrm{m}^{-3}$
e	elementary charge	$1.60218 \times 10^{-19} \mathrm{C}$
eV	electron volt	$1.60218 \times 10^{-19}\mathrm{J}$
c	speed of light	$2.99792\times10^8\mathrm{ms^{-1}}$
h	Planck's constant	$6.62607 \times 10^{-34}\mathrm{Js}$
\hbar	reduced Planck's constant	$1.05457 \times 10^{-34}\mathrm{Js}\;(h/2\pi)$
$R_{ m K-90}$	von Klitzing constant	25812.80745555Ω
m_e	electron mass	$9.109383 \times 10^{-31}\mathrm{kg}$

Source: CODATA Recommende Values of the Fundamental Physics Constants: 2014, Mohr et~al.¹

Acronyms

SB Schottky barrier

Chapter 1

Chapter Title

1.1 Section Title

Contents here with Schottky barrier (SB).

References

[1] P. J. Mohr, D. B. Newell, and B. N. Taylor. Codata recommended values of the fundamental physical constants: 2014. *ArXiv e-prints*, jul 2015.

Autobiographical Statement

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